

JAN 18 2000

SUMMARY OF SAFETY AND EFFECTIVENESS

1. Device Name : Magnetic Resonance Imaging Accessory
2. Proprietary Name : Legend 5000 Phased Array Knee and Foot Coil
3. Classification : Class II
4. Establishment Registration #: 1529041
5. Manufacture Facility Location: USA Instruments, Inc.
1515 Danner Drive
Aurora, Ohio 44202
Telephone: 330-562-1000; Fax: 330-562-1422.
6. Performance Standard: No applicable performance standards have been issued under Section 514 of the Food, Drug and Cosmetic Act.
7. Intended Use: The Phased Array Knee and Foot Coil is a specialty receive-only RF coil, used for obtaining diagnostic images of the knee and foot anatomy in Magnetic Resonance Imaging systems. The indications for use are the same as for standard MR Imaging. The Phased Array Knee and Foot Coil is designed for use with GE Signa HFO/i (0.7 Tesla) MRI scanner (K992746) manufactured by GE Medical Systems.
8. Device Description: The Knee and Foot Coil package consists of a knee coil (two sizes: small and large) and an attachable foot coil. The electrical circuitry is enclosed in a durable housing assembly made of polyurethane, fiberglass, and ABS/PVC plastic alloy, which are fire rated and have high impact and tensile strength. The Knee Coil is mechanically split into two halves for easier coil handling and more accurate positioning of the patient's knee in the coil. The Foot Coil is contoured to accommodate the foot and is mechanically attached to the knee coil.

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9. Safety and Effectiveness

<p>Phased Array Knee and Foot Coil Product Features</p>	<p>Comparison to predicate device or other 510(k) cleared product</p>
<p>Intended Use: Knee and Foot Imaging Applications</p>	<p>-Similar to the Leo 7000 Quadrature Knee Coil manufactured by USA Instruments, Inc. (K971246) -Similar to the Model 473SI-42D Quadrature Lower Extremity Coil manufactured by Medical Advances, Inc. (K982496)</p>
<p>Indications for Use: Identical to routine MRI imaging</p>	<p>-Similar to the Leo 7000 Quadrature Knee Coil manufactured by USA Instruments, Inc. (K971246)</p>
<p>Coil Body Former Material: Flame retardant Polyurethane, ABS/PVC Plastic Alloy, Glass fiber reinforced polyester (Fiberglass)</p>	<p>-Similar to the Leo 7000 Quadrature Knee Coil manufactured by USA Instruments, Inc. (K971246) -Similar to the Premier 7000 P/A CTL Spine Coil manufactured by USA Instruments, Inc. (K980157)</p>
<p>Coil Design: Two Channel Phased Array Receive Only Design</p>	<p>-Similar to the Mark 5000 Phased Array Shoulder Coil manufactured by USA Instruments, Inc. (K983143)</p>
<p>Decoupling: RF Chokes with Switching Diodes</p>	<p>-Similar to the Leo 7000 Quadrature Knee Coil manufactured by USA Instruments, Inc. (K971246)</p>
<p>Prevention of RF Burns: Does not transmit RF Power, Decoupling isolates the coil elements from RF fields during RF transmission, Coil elements and circuitry are enclosed in a non-conductive housing.</p>	<p>-Similar to the Leo 7000 Quadrature Knee Coil manufactured by USA Instruments, Inc. (K971246)</p>
<p>Radio Frequency Absorption: Coil is a receive only coil and does not transmit RF power</p>	<p>-Similar to the Leo 7000 Quadrature Knee Coil manufactured by USA Instruments, Inc. (K971246)</p>
<p>Formation of Resonant Loops: Decoupling isolates coil elements from RF fields during RF transmission, Length of cable and stiffness does not permit looping.</p>	<p>-Similar to the Leo 7000 Quadrature Knee Coil manufactured by USA Instruments, Inc. (K971246)</p>



Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

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Rony Thomas
Manager, Regulatory Affairs
USA Instruments, Inc.
1515 Danner Drive
Aurora, Ohio 44202

Re: K994040
Legend 5000 Phased Array Knee and Foot Coil
Dated: November 22, 1999
Received: November 29, 1999
Regulatory class: II
21 CFR 892.1000/Procode: 90 MOS

Dear Mr. Thomas:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4613. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597, or at its internet address "<http://www.fda.gov/cdrfv/dsma/dsmamain.html>".

Sincerely yours,

CAPT Daniel G. Schultz, M.D.
Acting Director, Division of Reproductive,
Abdominal, Ear, Nose and Throat,
and Radiological Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

510(k) Number (if known): K994040

Device Name: Phased Array Knee and Foot Coil

Indications for Use: The Phased Array Knee and Foot Coil is designed to provide Magnetic Resonance Images of the knee and foot anatomies. The Phased Array Knee and Foot Coil has been designed for use with the GE Signa HFO/i 0.7T scanner.

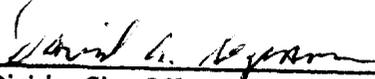
Anatomic Regions: Knee and Foot
Nuclei Excited: Hydrogen

The indications for use are the same as for standard imaging:

The Signa HFO/i 0.7T system is indicated for use as an NMR device that produces images that: (1) correspond to the distribution of protons exhibiting NMR signal, (2) depend upon NMR parameters (proton density, spin lattice relaxation time T1, spin-spin relaxation time T2) and (3) display the soft tissue structure of the head and whole body. When interpreted by a trained physician, these images yield information that can be useful in the determination of a diagnosis.

(PLEASE DO NOT WRITE BELOW THIS LINE- CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)



(Division Sign-Off)

Division of Reproductive, Abdominal, ENT,
and Radiological Devices

510(k) Number K994040

Prescription Use _____
(Per 21 CFR 801.109)

OR

Over-The-Counter Use _____
(Optional Format 1-2-96)